

CLAIMS

What is claimed is:

1. A method for providing coverage for access to a wireless communication system comprising the steps of:
 - locating wireless communication equipment in a first group of cells, the first group of cells located in a first defined area; and
 - simulcasting radio signals on a common radio frequency (RF) carrier in the first group of cells, such that handoff does not occur while a mobile unit travels along at least a portion of the defined area between the cells therein.
2. A method as in claim 1 wherein the defined area is a corridor along which vehicles travel.
3. A method as in claim 2 additionally comprising the step of:
 - locating wireless communication base station transceiver equipment at a cell located at a junction between at least two corridors along which vehicles travel.
4. A method as in claim 3 wherein different RF carriers are assigned to the first group of cells and to the cell at the corridor junction location so that handoff from one RF carrier to another R carrier occurs only at the corridor junction location.
5. A method as in claim 3 wherein the corridors are subway tunnels.
6. A method as in claim 5 wherein the junction is a subway station.

7. A method as in claim 3 wherein the corridors are railway tracks.
8. A method as in claim 7 wherein the junction is a railway station.
9. A method as in claim 3 wherein the junction is at an area of expected slow speed mobility.
10. A method as in claim 1 wherein the defined area is an area of expected high speed mobility.
11. A method as in claim 1 wherein the wireless communication equipment located in the first group of cells further comprises Remote Antenna Driver (RAD) equipment.
12. A method as in claim 3 wherein the vehicles travel along the corridor according to an expected schedule, and radio channel allocation is made to the first group of cells according to the schedule.
13. A method as in claim 12 wherein the schedule indicates an expected time of travel of a vehicle through the defined area, and the radio channel allocation is made for such times.
14. A method as in claim 12 wherein the schedule indicates an expected time of travel of a vehicle through the junction without stopping, and the radio channel allocation is maintained for mobile units crossing from one of the first group of cells into a cell located at the corridor junction location.
15. A method as in claim 1 wherein the step of simulcasting additionally comprises the step of simulcasting a first set of radio carrier frequencies.

16. A method for providing wireless communication service in an area in which a base transceiver station with a tower mounted antenna carries telephony signals between wireless communication devices operating in said area and a network communication system, said method comprising:

transmitting a communication signal from said base transceiver station to a plurality of remote transmitters physically located in another contiguous area at the same time that said communication signal is transmitted to a wireless communication device that is operating in part of said area using said tower mounted antenna; and

re-transmitting said communication signal to said wireless communication device using said remote transmitters as said wireless communication device travels through respective portions of said area covered by said remote transmitters.